

Winter 2010 -- T-Th 9:30-10:50am

CIV_ENV 395, Section 20

Organic Geochemistry

Offered jointly with EARTH 314-0



- The primary objective of this course will be to investigate the sources and fates of organic matter in the natural environment.
- The implications of the cycling of organic matter for the earth system will be explored.
- How organic geochemistry can be applied to the study of modern and ancient environments will also be discussed.

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Office hours: TBA

Organic Geochemistry

Prerequisites: EARTH 201, 202 and one quarter of chemistry, or consent of instructor

Readings:

Text: Killops and Killops, An Introduction to Organic Geochemistry, Blackwell Publishing, 2005

Individual readings from the scientific literature

Expected topic schedule:

Week 1:	Introduction and analytical methods
Week 2:	The Global C-cycle – budgets and processes
Week 3-5:	Sources and fates of bioorganics
Week 6:	Geo-organics and the preservation of organic matter
Week 7:	Fossil fuels
Week 8-9:	Applications
Week 10:	Reading week

Homework: short written reports/problem sets based on readings and independent literature research

Grading: Homework 60%, final topic review paper (undergraduates)/research proposal (graduate students) 30%, oral presentation (10%)

Exams: No exams. Oral presentations will be given during the final exam period.